

CLAIMS

What is claimed is:

- 1 1. A system for screening a real-time transport protocol route prior to comparing
2 said route to a local policy, comprising:
3 a transceiver;
4 software stored therein defining functions to be performed by said system; and
5 a processor configured by said software to perform the steps of,
6 determining if route information received by said transceiver is from an external
7 source or an internal source;
8 if said route information is from an external source, performing a first internal
9 screen of said route information, wherein a destination address defined by said received
10 route information is compared to a local destination address defined by said first internal
11 screen, and
12 if said route information is from an internal source, performing a second internal
13 screen of said route information, wherein an origin address defined by said received route
14 information is compared to a local origin address defined by said second internal screen.

- 1 2. The system of claim 1, wherein said processor is further configured by said
2 software to perform the step of discarding said received route information, if said destination
3 address defined by said received route information does not match said local destination address
4 defined by said first internal screen.

3. The system of claim 1, wherein said processor is further configured by said software to perform the step of, determining whether said destination address defined by said received route information or said local destination address defined by said first internal screen is a more specific destination address, if a portion of said destination address defined by said received route information matches a portion of said local destination address defined by said first internal screen

4. The system of claim 3, wherein said processor is further configured by said memory to perform the step of, keeping said local destination address defined by said first internal screen and discarding said destination address defined by said received route information, if said local destination address defined by said first internal screen is a more specific destination address than said destination address defined by said received route information.

5. The system of claim 3, wherein said processor is further configured by said software to perform the step of, storing said destination address defined by said received route information for future comparison to a local policy, if said local destination address defined by said first internal screen is a less specific destination address than said destination address defined by said received route information.

6. The system of claim 1, wherein the format of said destination address is conformed to E.164 style addresses, Internet style addresses, SIP telephone addresses or non-SIP telephone addresses.

1 7. The system of claim 1, wherein said processor is further configured by said
2 software to perform the step of, storing said received route information for future comparison to
3 a local policy, if said received route information does not have said origin address.

1 8. The system of claim 1, wherein said processor is further configured by said
2 software to perform the step of, discarding said received route information if said origin address
3 defined by said received route information does not match said local origin address defined by
4 said first internal screen.

1 9. The system of claim 1, wherein said processor is further configured by said
2 software to perform the step of, determining whether said origin address defined by said received
3 route information or said local origin address defined by said first internal screen is a more
4 specific origin address, if a portion of said origin address defined by said received route
5 information matches a portion of said local origin address defined by said first internal screen.

1 10. The system of claim 9, wherein said processor is further configured by said
2 software to perform the step of, keeping said local origin address defined by said first internal
3 screen and discarding said origin address defined by said received route information, if said local
4 origin address defined by said first internal screen is a more specific origin address than said
5 origin address defined by said received route information.

1 11. The system of claim 9, wherein said processor is further configured by said
2 software to perform the step of, storing said origin address defined by said received route
3 information for future comparison to a local policy, if said local origin address defined by said
4 first internal screen is a less specific origin address than said origin address defined by said
5 received route information.

1 12. The system of claim 1, wherein said processor is further configured by said
2 software to perform the step of, reading a received carrier attribute provided by said received
3 route information, wherein said received carrier attribute describes a source of said received
4 route information, prior to comparing said received route information to said local policy.

1 13. The system of claim 12, wherein said processor is further configured by said
2 software to perform the step of, discarding said received route information prior to comparing
3 said received route information to said local policy, if a received carrier name, defined by said
4 received carrier attribute, does not match a local carrier name.

1 14. The system of claim 12, wherein said processor is further configured by said
2 software to perform the step of, discarding said received route information prior to comparing
3 said received route information to said local policy, if a received carrier days of availability,
4 defined by said received carrier attribute, does not match a local carrier days of availability.

1 15. The system of claim 12, wherein said processor is further configured by said
2 software to perform the step of, discarding said received route information prior to comparing
3 said received route information to said local policy, if a received carrier hours of availability,
4 defined by said received carrier attribute, does not match a local carrier hours of availability.

1 16. The system of claim 12, wherein said processor is further configured by said
2 software to perform the step of, discarding said received route information prior to comparing
3 said received route information to said local policy, if a received carrier time of availability,
4 defined by said received carrier attribute, does not match a local carrier time of availability.

1 17. The system of claim 12, wherein said processor is further configured by said
2 software to perform the step of, discarding said received route information prior to comparing
3 said received route information to said local policy, if a received carrier cost, defined by said
4 received carrier attribute, does not match a local carrier cost.

1 18. The system of claim 1, wherein the format of said origin address is conformed to
2 E.164 style addresses, Internet style addresses, SIP telephone addresses, or non-SIP telephone
3 addresses.

1 19. The system of claim 1, wherein said route information is provided within a
2 telephony routing over Internet protocol (TRIP) update message.

1 20. A method of screening a real-time transport protocol route prior to comparing said
2 route to a local policy, comprising the steps of:

3 receiving route information describing said route from a first endpoint to a second
4 endpoint;

5 determining if said route information is received from an external source or an internal
6 source;

7 if said route information is from an external source, performing a first internal screen of
8 said route information, wherein a destination address defined by said received route information
9 is compared to a local destination address defined by said first internal screen; and

10 if said route information is from an internal source, performing a second internal screen
11 of said route information, wherein an origin address defined by said received route information is
12 compared to a local origin address defined by said second internal screen.

1 21. The method of claim 20, wherein said step of comparing said destination address
2 defined by said received route information to said local destination address defined by said first
3 internal screen further comprises the step of:

4 if said destination address defined by said received route information does not match said
5 local destination address defined by said first internal screen, discarding said received route
6 information.

1 22. The method of claim 20, wherein said step of comparing said destination address
2 defined by said received route information to said local destination address defined by said first
3 internal screen, further comprises the steps of:

4 if a portion of said destination address defined by said received route information
5 matches a portion of said local destination address defined by said first internal screen,
6 determining whether said destination address defined by said received route information or said
7 local destination address defined by said first internal screen is a more specific destination
8 address.

1 23. The method of claim 22, further comprising the step of:

2 if said local destination address defined by said first internal screen is a more specific
3 destination address than said destination address defined by said received route information,
4 keeping said local destination address defined by said first internal screen and discarding said
5 destination address defined by said received route information.

1 24. The method of claim 22, further comprising the step of:

2 if said local destination address defined by said first internal screen is a less specific
3 destination address than said destination address defined by said received route information,
4 storing said destination address defined by said received route information for future comparison
5 to a local policy.

1 25. The method of claim 20, wherein the format of said destination address is

2 conformed to E.164 style addresses, Internet style addresses, SIP telephone addresses, or non-
3 SIP telephone addresses.

1 26. The method of claim 20, further comprising the step of:

2 if said received route information does not have said origin address, storing said received
3 route information for future comparison to a local policy.

1 27. The method of claim 20, wherein said step of comparing said origin address

2 defined by said received route information to said local origin address defined by said first
3 internal screen, further comprises the step of:

4 if said origin address defined by said received route information does not match said local
5 origin address defined by said first internal screen, discarding said received route information.

1 28. The method of claim 20, wherein said step of comparing said origin address
2 defined by said received route information to said local origin address defined by said first
3 internal screen, further comprises the steps of:

4 if a portion of said origin address defined by said received route information matches a
5 portion of said local origin address defined by said first internal screen, determining whether said
6 origin address defined by said received route information or said local origin address defined by
7 said first internal screen is a more specific origin address.

1 29. The method of claim 28, further comprising the step of:

2 if said local origin address defined by said first internal screen is a more specific origin
3 address than said origin address defined by said received route information, keeping said local
4 origin address defined by said first internal screen and discarding said origin address defined by
5 said received route information.

1 30 The method of claim 28, further comprising the step of:

2 if said local origin address defined by said first internal screen is a less specific origin
3 address than said origin address defined by said received route information, storing said origin
4 address defined by said received route information for future comparison to a local policy.

1 31. The method of claim 20, further comprising the step of:

2 reading a received carrier attribute provided by said received route information, wherein
3 said received carrier attribute describes a source of said received route information, prior to
4 comparing said received route information to said local policy.

1 32. The method of claim 31, further comprising the step of:

2 if a received carrier name, defined by said received carrier attribute, does not match a
3 local carrier name, discarding said received route information prior to comparing said received
4 route information to said local policy.

1 33. The method of claim 31, further comprising the step of:

2 if a received carrier days of availability, defined by said received carrier attribute, does
3 not match a local carrier days of availability, discarding said received route information prior to
4 comparing said received route information to said local policy.

1 34. The method of claim 31, further comprising the step of:

2 if a received carrier hours of availability, defined by said received carrier attribute, does
3 not match a local carrier hours of availability, discarding said received route information prior to
4 comparing said received route information to said local policy.

1 35. The method of claim 31, further comprising the step of:

2 if a received carrier time of availability, defined by said received carrier attribute, does
3 not match a local carrier time of availability, discarding said received route information prior to
4 comparing said received route information to said local policy.

1 36. The method of claim 31, further comprising the step of:

2 if a received carrier cost, defined by said received carrier attribute, does not match a local
3 carrier cost, discarding said received route information prior to comparing said received route
4 information to said local policy.

1 37. A system for screening real-time transport protocol routes prior to comparing said

2 routes to a local policy, comprising:

3 means for receiving route information describing a route from a first endpoint to a second
4 endpoint;

5 means for determining if said route information is received from an external source or an
6 internal source, which is logically connected to said means for receiving;

7 means for performing a first internal screen of said route information, which is
8 configured to compare a destination address defined by received route information to a local
9 destination address defined by said first internal screen, which is logically connected to said
10 means for receiving and said means for determining; and

11 means for performing a second internal screen of said route information, which is
12 configured to compare an origin address defined by said received route information to a local
13 origin address defined by said second internal screen, which is logically connected to said means
14 for receiving, said means for determining, and said means for performing.

1 38. The system of claim 37, further comprising a means for discarding said route
2 information if said destination address defined by said received route information does not match
3 said local destination address defined by said first internal screen.

1 39. The system of claim 37, further comprising a means for determining whether said
2 destination address defined by said received route information or said local destination address
3 defined by said first internal screen is a more specific destination address if a portion of said
4 destination address defined by said received route information matches a portion of said local
5 destination address defined by said first internal screen

1 40. The system of claim 39, further comprising a means for keeping said local
2 destination address defined by said first internal screen and discarding said destination address
3 defined by said received route information if said local destination address defined by said first
4 internal screen is a more specific destination address than said destination address defined by
5 said received route information.

1 41. The system of claim 39, further comprising a means for storing said destination
2 address defined by said received route information for future comparison to a local policy if said
3 local destination address defined by said first internal screen is a less specific destination address
4 than said destination address defined by said received route information.

1 42. The system of claim 37, wherein the format of said destination address conforms
2 to E.164 style addresses, Internet style addresses, SIP telephone addresses, or non-SIP telephone
3 addresses.

1 43. The system of claim 37, further comprising a means for storing said received
2 route information for future comparison to a local policy if said received route information does
3 not have said origin address.

1 44. The system of claim 37, further comprising a means for discarding said received
2 route information if said origin address defined by said received route information does not
3 match said local origin address defined by said first internal screen.

1 45. The system of claim 37, further comprising a means for determining whether said
2 origin address defined by said received route information or said local origin address defined by
3 said first internal screen is a more specific origin address if a portion of said origin address
4 defined by said received route information matches a portion of said local origin address defined
5 by said first internal screen.

1 46. The system of claim 45, further comprising a means for keeping said local origin
2 address defined by said first internal screen and discarding said origin address defined by said
3 received route information if said local origin address defined by said first internal screen is a
4 more specific origin address than said origin address defined by said received route information.

1 47. The system of claim 45, further comprising a means for storing said origin
2 address defined by said received route information for future comparison to a local policy if said
3 local origin address defined by said first internal screen is a less specific origin address than said
4 origin address defined by said received route information.

1 48. The system of claim 37, further comprising a means for reading a received carrier
2 attribute provided by said received route information, wherein said received carrier attribute
3 describes a source of said received route information, prior to comparing said received route
4 information to said local policy.

1 49. The system of claim 48, further comprising a first means for discarding said
2 received route information prior to comparing said received route information to said local
3 policy if a received carrier name, defined by said received carrier attribute, does not match a
4 local carrier name.

1 50. The system of claim 48, further comprising a second means for discarding said
2 received route information prior to comparing said received route information to said local
3 policy if a received carrier days of availability, defined by said received carrier attribute, does
4 not match a local carrier days of availability.

1 51. The system of claim 48, further comprising a third means for discarding said
2 received route information prior to comparing said received route information to said local
3 policy if a received carrier hours of availability, defined by said received carrier attribute, does
4 not match a local carrier hours of availability.

1 52. The system of claim 48, further comprising a fourth means for discarding said
2 received route information prior to comparing said received route information to said local
3 policy if a received carrier time of availability, defined by said received carrier attribute, does not
4 match a local carrier time of availability.

1 53. The system of claim 48, further comprising a fifth means for discarding said
2 received route information prior to comparing said received route information to said local
3 policy if a received carrier cost, defined by said received carrier attribute, does not match a local
4 carrier cost.